



Analytical Laboratory

Analytical Lab
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13339 Hagers Ferry Road
Huntersville, NC 28078-7929
McGuire Nuclear Complex - MG03A2
Phone: 980-875-5245 Fax: 980-875-4349

Order Summary Report

Order Number: J12100033

Project Name: NPDES - MONTHLY

Customer Name(s): Matthew Dorn, Mark Harper, Todd Spade, Tara Thomas, Matthew Hoyt

Customer Address: 11021 BROWER RD.

NORTH BEND, OH 45052

Lab Contact: Theron T James Phone: 980-875-4795

Report Authorized By: _____ **Date:** 10/11/2012
(Signature)

Program Comments:

Miami Fort October NPDES - Monthly

Data Flags & Calculations:

Any analytical tests or individual analytes within a test flagged with a Qualifier indicate a deviation from the method quality system or quality control requirement. The qualifier description is found at the end of the Certificate of Analysis (sample results) under the qualifiers heading. All results are reported on a dry weight basis unless otherwise noted. Subcontracted data included on the Duke Certificate of Analysis is to be used as information only. Certified vendor results can be found in the subcontracted lab final report. Duke Energy Analytical Laboratory subcontracts analyses to other vendor laboratories that have been qualified by Duke Energy to perform these analyses except where noted.

Data Package:

This data package includes analytical results that are applicable only to the samples described in this narrative. An estimation of the uncertainty of measurement for the results in the report is available upon request. This report shall not be reproduced, except in full, without the written consent of the Analytical Laboratory. Please contact the Analytical laboratory with any questions. The order of individual sections within this report is as follows:

Job Summary Report, Sample Identification, Technical Validation of Data Package, Analytical Laboratory Certificate of Analysis, Analytical Laboratory QC Reports, Sub-contracted Laboratory Results, Customer Specific Data Sheets, Reports & Documentation, Customer Database Entries, Test Case Narratives, Chain of Custody (COC)

Certification:

The Analytical Laboratory holds the following State Certifications : North Carolina (DENR) Certificate #248, South Carolina (DHEC) Laboratory ID # 99005. Contact the Analytical Laboratory for definitive information about the certification status of specific methods.

The results in this report meet NELAP requirements through New York State Department of Health Certification # 11717.. Certified parameters are designated with an "N" in the analytical report.

Sample ID's & Descriptions:

Sample ID	Plant/Station	Collection Date and Time	Collected By	Sample Description
2012020815	MIAMI-FORT	02-Oct-12 7:37 AM	M. Dorn	OUTFALL 002
2012020816	MIAMI-FORT	02-Oct-12 7:48 AM	M. Dorn	OUTFALL 608
2 Total Samples				

Technical Validation Review

Checklist:

COC and .pdf report are in agreement with sample totals and analyses (compliance programs and procedures).

☒ Yes

☐ No

All Results are less than the laboratory reporting limits.

☐ Yes

☒ No

All laboratory QA/QC requirements are acceptable.

☒ Yes

☐ No

Report Sections Included:

☒ Job Summary Report

☒ Sample Identification

☒ Technical Validation of Data Package

☒ Analytical Laboratory Certificate of Analysis

☐ Analytical Laboratory QC Report

☐ Sub-contracted Laboratory Results

☐ Customer Specific Data Sheets, Reports, & Documentation

☐ Customer Database Entries

☒ Chain of Custody

☐ Electronic Data Deliverable (EDD) Sent Separately

Reviewed By: Mary Ann Ogle

Date: 10/11/2012

Certificate of Laboratory Analysis

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This report shall not be reproduced, except in full.

Order # J12100033

Site: OUTFALL 002

Collection Date: 02-Oct-12 7:37 AM

Sample #: 2012020815

Matrix: NPDES

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<u>TOTAL DISSOLVED SOLIDS</u>								
TDS	1200	mg/L	N	40	1	SM2540C	10/03/2012 15:30	TJA7067

Site: OUTFALL 608

Collection Date: 02-Oct-12 7:48 AM

Sample #: 2012020816

Matrix: NPDES

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<u>ALKALINITY (FIXED END POINT 4.5)</u>								
Alkalinity (mg/L CaCO ₃)	1200	mg/L (CaCO ₃)	N	0.1	1	SM2320B	10/10/2012 16:44	TJA7067
<u>INORGANIC IONS BY IC</u>								
Chloride	5600	mg/L	N	100	1000	EPA 300.0	10/03/2012 14:49	BGN9034
Fluoride	13	mg/L	N	5	50	EPA 300.0	10/03/2012 14:49	BGN9034
Sulfate	6500	mg/L	N	100	1000	EPA 300.0	10/03/2012 14:49	BGN9034
<u>TOTAL METALS BY ICP</u>								
Boron (B)	346	mg/L	N	0.5	10	EPA 200.7	10/05/2012 14:16	DJSULL1
Iron (Fe)	1.52	mg/L	N	0.01	1	EPA 200.7	10/05/2012 14:16	DJSULL1
Manganese (Mn)	0.409	mg/L	N	0.005	1	EPA 200.7	10/05/2012 14:16	DJSULL1
<u>TOTAL RECOVERABLE METALS BY ICP-MS</u>								
Arsenic (As)	< 20	ug/L	N	20	1	EPA 200.8	10/05/2012 14:24	KRICHR
Barium (Ba)	177	ug/L	N	20	1	EPA 200.8	10/05/2012 14:24	KRICHR
Cadmium (Cd)	< 20	ug/L	N	20	1	EPA 200.8	10/05/2012 14:24	KRICHR
Chromium (Cr)	< 20	ug/L	N	20	1	EPA 200.8	10/05/2012 14:24	KRICHR
Copper (Cu)	< 20	ug/L	N	20	1	EPA 200.8	10/05/2012 14:24	KRICHR
Lead (Pb)	< 20	ug/L	N	20	1	EPA 200.8	10/05/2012 14:24	KRICHR
Zinc (Zn)	34.8	ug/L	N	20	1	EPA 200.8	10/05/2012 14:24	KRICHR
<u>TOTAL DISSOLVED SOLIDS</u>								
TDS	22000	mg/L	N	40	1	SM2540C	10/03/2012 15:30	TJA7067
<u>TOTAL SUSPENDED SOLIDS</u>								
TSS	< 5	mg/L	N	5	1	SM2540D	10/08/2012 10:07	SWILLI3

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM



Duke Energy Analytical Laboratory

Mail Code MGO3A2 (Building 7405)
13339 Hagers Ferry Rd
Huntersville, N. C. 28078

(704) 875-5245

(704) 875-4349

Fax:

Analytical Laboratory Use Only

LIMS #

Sample Class NPDES

Samples
Originating
From

OHIO

J12100033

Logged By

Date & Time

RLL

10/3/12 1101

Vendor

1.0

Cooler Temp (C)

PO #

15 Preserv.: 1=HCL
2=H₂SO₄ 3=HNO₃
4=Ice 5=None

4

4

3

4

4

MR #

Customer to complete all
appropriate non-shaded areas.

16 Analyses
Required

17 Comp.

18 Grab

TDS

Cl, F, SO₄B, Fe, Mn, As, Ba,
Cd, Cr, Cu, Pb, Zn

TSS

Alkalinity

14 Collection Information

Date

Time

Signature

10/2/12 07:34

Matt Dorn

10/2/12 07:48

Matt Dorn

12 Chem

Desktop No.

13 Sample Description or ID

Outfall 002

Outfall 608

LAB USE ONLY

11 Lab ID

2012020815

2012020816

Customer to complete appropriate columns to right

Customer to sign & date below - fill out from left to right.

1) Relinquished By

Matt Dorn

Date/Time

10/2/2012 08:22

3) Relinquished By

Counner

Date/Time

10/3/12 1050

5) Relinquished By

Date/Time

7) Relinquished By

Date/Time

9) Seal/Locked By

Matt Dorn

Date/Time

10/2/2012 08:22

11) Seal/Locked By

Date/Time

2) Accepted By

Counner

Date/Time

4) Accepted By

L. Davis

Date/Time

10/3/12 1050

6) Accepted By:

Date/Time

8) Accepted By:

Date/Time

10) Seal/Lock Opened By

L. Davis

Date/Time

10/3/12 1055

12) Seal/Lock Opened By

Date/Time

Comments:

ICP TOT - B, Fe, Mn IMS-TRM - As, Ba, Cd, Cr, Cu, Pb, Zn

Fe HACH = 0.07mg/L

Customer, IMPORTANT!
Please indicate desired turnaround.

22 Requested Turnaround

10 Days X

*7 Days _____

*48 Hr _____

*Other _____

*Add. Cost Will Apply

Analytical Lab

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ORIGINAL to LAB,
COPY to CLIENT